Twitter Thread by Michael Wara

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Ever since @JesseJenkins and colleagues work on a zero carbon US and this work by @DrChrisClack and colleagues on incorporating DER, I've been having the following set of thoughts about how to reduce the risk of failure in a US clean energy buildout. Bottom line is much more DER.

> Rooftop solar can play a key role in a transition to 100% renewable energy - and it can help American's pocketbooks #GoSolarhttps://t.co/6p9jb62EGW
>
> — Environment America (@EnvAm) January 14, 2021

Typically, when we see zero-carbon electricity coupled to electrification of transport and buildings, implicitly standing behind that is totally unprecedented buildout of the transmission system. The team from Princeton's modeling work has this in spades for example.

But that, more even than the new generation required, runs straight into a thicket/woodchipper of environmental laws and public objections that currently (and for the last 50y) limit new transmission in the US. We built most transmission prior to the advent of environmental law.

So what these studies are really (implicitly) saying is that NEPA, CEQA, ESA, §404 permitting, eminent domain law, etc, - and the public and democratic objections that drive them - will have to change in order to accommodate the necessary transmission buildout.

I live in a D supermajority state that has, for at least the last 20 years, been in the midst of a housing crisis that creates punishing impacts for people's lives in the here-and-now and is arguably mostly caused by the same issues that create the transmission bottlenecks.

If we aren't willing to really look at big changes to solve that problem, shouldn't we be thinking much more seriously about solutions for climate that do not depend on big changes to these laws in order to site the necessary transmission infrastructure?

Maybe the real reason to prefer DER solutions is that it avoids the need to do that transmission buildout - which probably can't happen at any price unless until fundamental changes occur in law that are extremely unlikely to ever occur.

We should not be staking our climate future on a situation where NIMBYs wake up one morning and become YIMBYs demanding CEQA/NEPA/land use reform. My money (and lived personal experience) is on that never happening. At best, we will get marginal improvements.

If we are going to place our chips on the super grid happening, we should be clear about that - and also about the real environmental and democratic tradeoffs that would occur and that are the reason why these laws exist in the first place.